

LAND APPLICATION SITE
NELSON E. SWARTZENTRUBER SITE
LUNES 1-4
LUNENBURG COUNTY

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 11/1/21 between Naomi Swartzenthaler referred to here as "Landowner", and Recyc Systems, Inc. referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Kentucky, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) with county documentation identifying owners, attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
		<u>48 A 45A</u>	

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

Class B biosolids Water treatment residuals Food processing waste Other industrial sludges
☒ Yes ☐ No ☒ Yes ☐ No ☒ Yes ☐ No ☒ Yes ☐ No

Printed name <u>Naomi Swartzenthaler</u>	Mailing Address <u>522 Hite Ln</u> <u>Kentucky VA 22924</u>	Landowner Signature <u>Naomi Swartzenthaler</u>
By: <u>SELF</u>	Phone No. <u>434 676 3198</u>	
<input type="checkbox"/> I certify that I have authority to sign for the landowner as indicated by my title as executor, Trustee or Power of attorney, etc. <input checked="" type="checkbox"/> I certify that I am a responsible official [or officer] authorized to act on behalf of the following corporation, partnership, proprietorship, LLC, municipality, state or federal agency, etc.		

Permittee:

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

Printed name <u>Susan Trumbo</u>	Mailing Address <u>PO Box 562, Remington Virginia 22734</u>	Permittee Authorized Representative Signature <u>[Signature]</u>
Title <u>Technical Manager</u>	Phone No. <u>540-547-3300</u>	

Permittee: Recyc Systems, Inc

County or City: humburg

Landowner: Naomi Swartzentruber

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Naomi Swartzentruber
Landowner's Signature

1-13-21
Date

Nelson Christman
Operator's Signature

522 N. 1st St. Kenner, LA 70144
mailing address & phone

1-31-21
Date

RECYC SYSTEMS, INC

FIELD DATA SHEET

Field Identification	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
		Water Table	Bed Rock/Shallow	Surf/Leach	Freq Flood			
LUNES 1	18.3	-	-	-	-	CM10	TM45A,P45A	3847
LUNES 2	21.4	-	-	-	-	CM10	TM45A,P45A	3847
LUNES 3	12.6	10B	-	-	-	CM10	TM45A,P45A	3847
LUNES 4	11.4	-	-	-	-	CM10	TM45A,P45A	3847
TOTAL ACRES IN SITE	63.7							

Recyc Systems, Inc

Nelson E. Swartzentruber Site

[illegible]

THE PLANNER IS NOT STATE CERTIFIED

Nutrient Management Plan Balance Sheet
(Fall, 2009-Winter, 2010)
Nelson E. Swartzentruber
Planner: Recyc Systems

Tract: 3847

Location: Lunenburg

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
6/LUNES 1(N)	18/18	2009	Hay/Pasture	100-40-95	0/0				100-40-95	N/A			
1/LUNES 2(N)	21/21	2009	Hay/Pasture	100-40-85	0/0				100-40-85	N/A			
4 5/LUNES 3(N)	13/13	2009	Hay/Pasture	100-40-110	0/0				100-40-110	N/A			
3/LUNES 4(N)	11/11	2009	Hay/Pasture	100-50-95	0/0				100-50-95	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

THE PLANNER IS NOT STATE CERTIFIED

Nelson E. Swartzentruber Narrative

This is the Nelson Swartzentruber farm located in Lunenburg County. The farm consists of hay and pasture.

This is a partial plan written for the purpose of obtaining a biosolids permit. Biosolids application has not been shown since it is uncertain when a permit will be obtained. The partial plan will be revised prior to biosolids application to obtain a target biosolids application rate.

Soil Test Summary

Tract	Field	Acre	Date	P2O5	K2O	Lab	Soil pH	Lime Date	rec. lime tons/Ac
3847	LUNES 1	18	2009-Fa	H- (68 P ppm)	M (80 K ppm)	A&L MIII	5.7		
3847	LUNES 2	21	2009-Fa	H- (55 P ppm)	M+ (121 K ppm)	A&L MIII	5.3		
3847	LUNES 3	13	2009-Fa	H (98 P ppm)	M- (59 K ppm)	A&L MIII	5.5		
3847	LUNES 4	11	[No Test]						

Field Productivities for Major Crops

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
3847	3847/6	LUNES 1	18	Appling	IVb	III II	III	IV	
	3847/1	LUNES 2	21	Appling	IVb	IV II	III	IV	
	3847/4 5	LUNES 3	13	Appling	IVb	IV II	III	IV	
	3847/3	LUNES 4	11	Cecil	IVb	IV II	III	IV	

Yield Range

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	≥170	≥80	≥64	≥6	≥4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	≤4	3.0-3.5
IV	100-130	50-60	40-48	NA	≤3.0
V	≤100	≤50	≤40	NA	NA

Farm Summary Report

Plan: New Plan Fall, 2009 - Winter, 2010

Farm Name: Nelson E. Swartzentruber

Location: Lunenburg

Specialist: Recyc Systems

Tract Name: 3847

FSA Number: 3847

Location: Lunenburg

Field Name: LUNES 1

Total Acres: 18.30 Usable Acres: 18.30

FSA Number: 6

Tract: 3847

Location: Lunenburg

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2009	5.7	H-(68 P ppm)	M(80 K ppm)	A&L MIII	

Field Warnings:

Field Name: LUNES 2

Total Acres: 21.40 Usable Acres: 21.40

FSA Number: 1
Tract: 3847
Location: Lunenburg
Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2009	5.3	H-(55 P ppm)	M+(121 K ppm)	A&L Mill	

Field Warnings:

Field Name: LUNES 3

Total Acres: 12.60 Usable Acres: 12.60

FSA Number: 4 5

Tract: 3847

Location: Lunenburg

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2009	5.5	H(98 P ppm)	M-(59 K ppm)	A&L Mill	

Field Warnings:**Field Name: LUNES 4**

Total Acres: 11.40 Usable Acres: 11.40

FSA Number: 3

Tract: 3847

Location: Lunenburg

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
	[NO TEST]			

Field Warnings:**Tract Name: Default Tract**

FSA Number: 0

Location: Lunenburg

MAPS

(Biosolids Land Application)

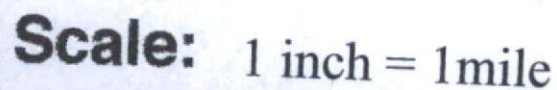


LUNES 1-4

VICINITY MAP



(Biosolids Land Application)



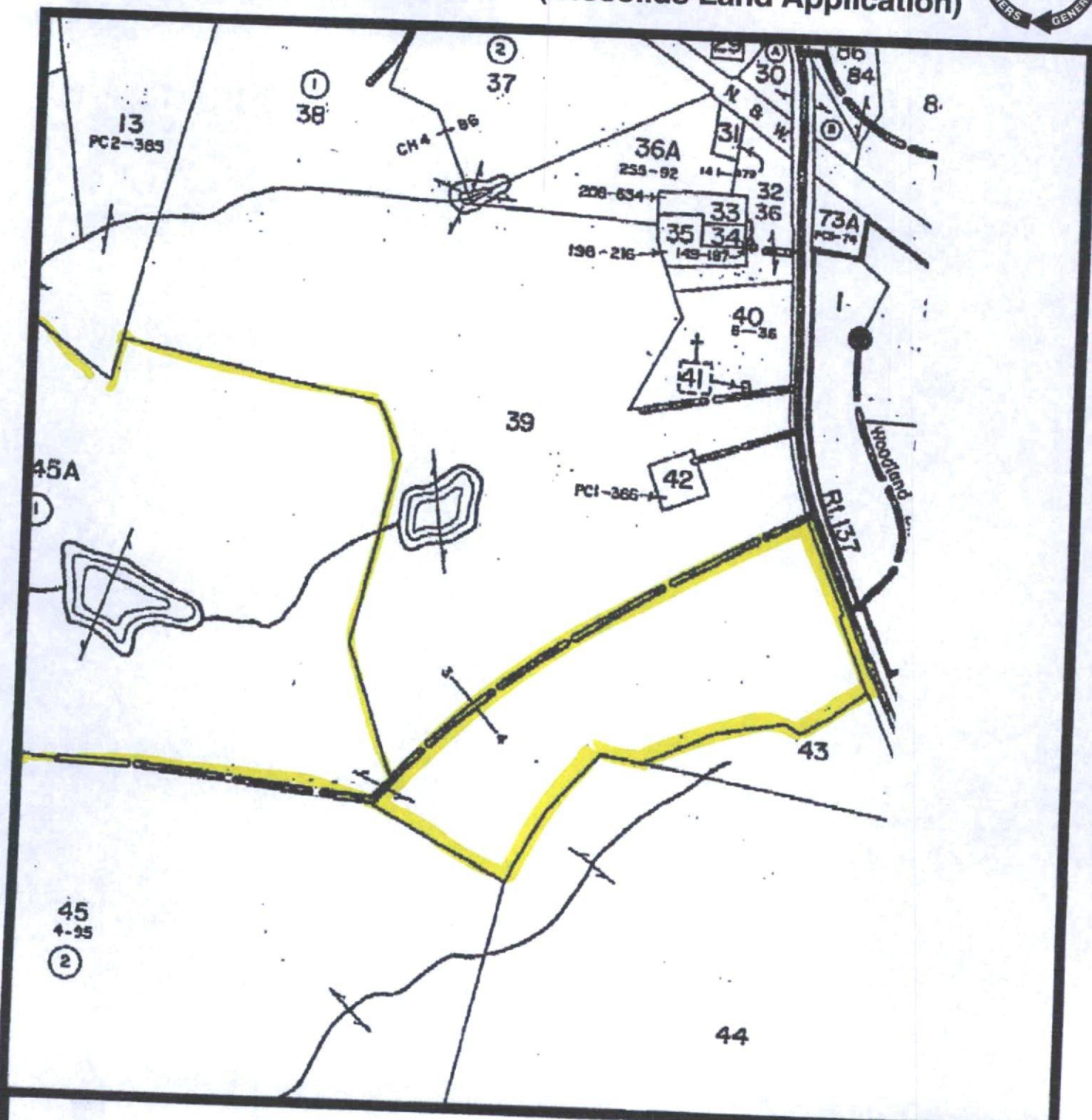
LUNES 1-4

VICINITY MAP



Inc.

(Biosolids Land Application)



Scale: 1 inch = 660 feet

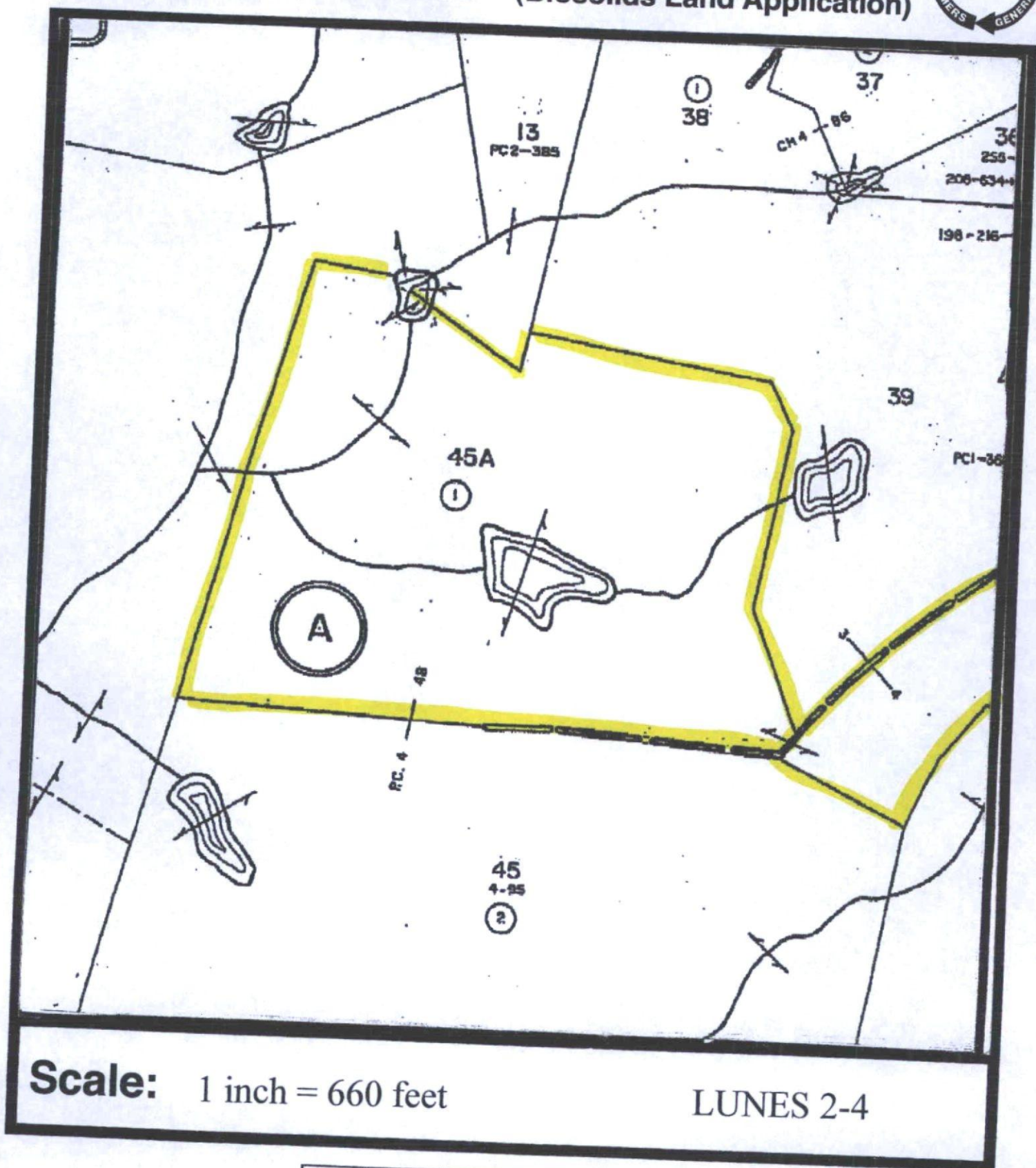
LUNES 1

TAX MAP



Kecyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1 inch = 660 feet

LUNES 2-4

TAX MAP



ADJOINING LANDOWNERS

NELSON SWARTZENTRUBER SITE

LUNENBURG COUNTY

Tax Map	Parcel #	Owner Name(s)
45A	12	Lewis G. or Lisa W. Tucker
	13	John Lewis Ghee
	39	James M. or Roger L. Baker
	43	Dora Hardy
	44	Ronald Moore
	45	Stephen Mast
45(7)	3	Grace W. Clements or Virginia Grace Talley

Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1 inch = 660 feet

LUNES 1

SOIL MAP



Recyc SystemsTM

Inc. (Biosolids Land Application)

(Biosolids Land Application)



Scale: 1 inch = 660 feet

LUNES 2-4

SOIL MAP





2009

Wetland Determination Identifiers

- ☒ Restricted Use
- ☒ Limited Restrictions
- ☒ Exempt from Conservation Compliance Provisions

Lunenburg County

Farm Service Agency

Number: 3847

Number: 16504

Wetland Identifiers do not represent the size, shape, or specific determination of an area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and labels, or contact NRCS.

Scale: 1 inch = 660 feet

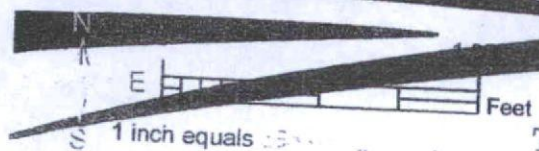
LUNES 1

AERIAL MAP



Recyc SystemsTM Inc.

(Biosolids Land Application)



Farm Number: 3847
Tract Number: 16504

Wetland Determination Identifiers

- ⊙ Restricted Use
- ▽ Limited Restrictions
- Exempt from Conservation Compliance Provisions

Farm

Wetland Identifiers do not delineate wetland boundaries.













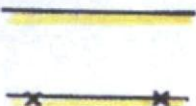



Scale: 1 inch = 660 feet

LUNES 2-4

AERIAL MAP

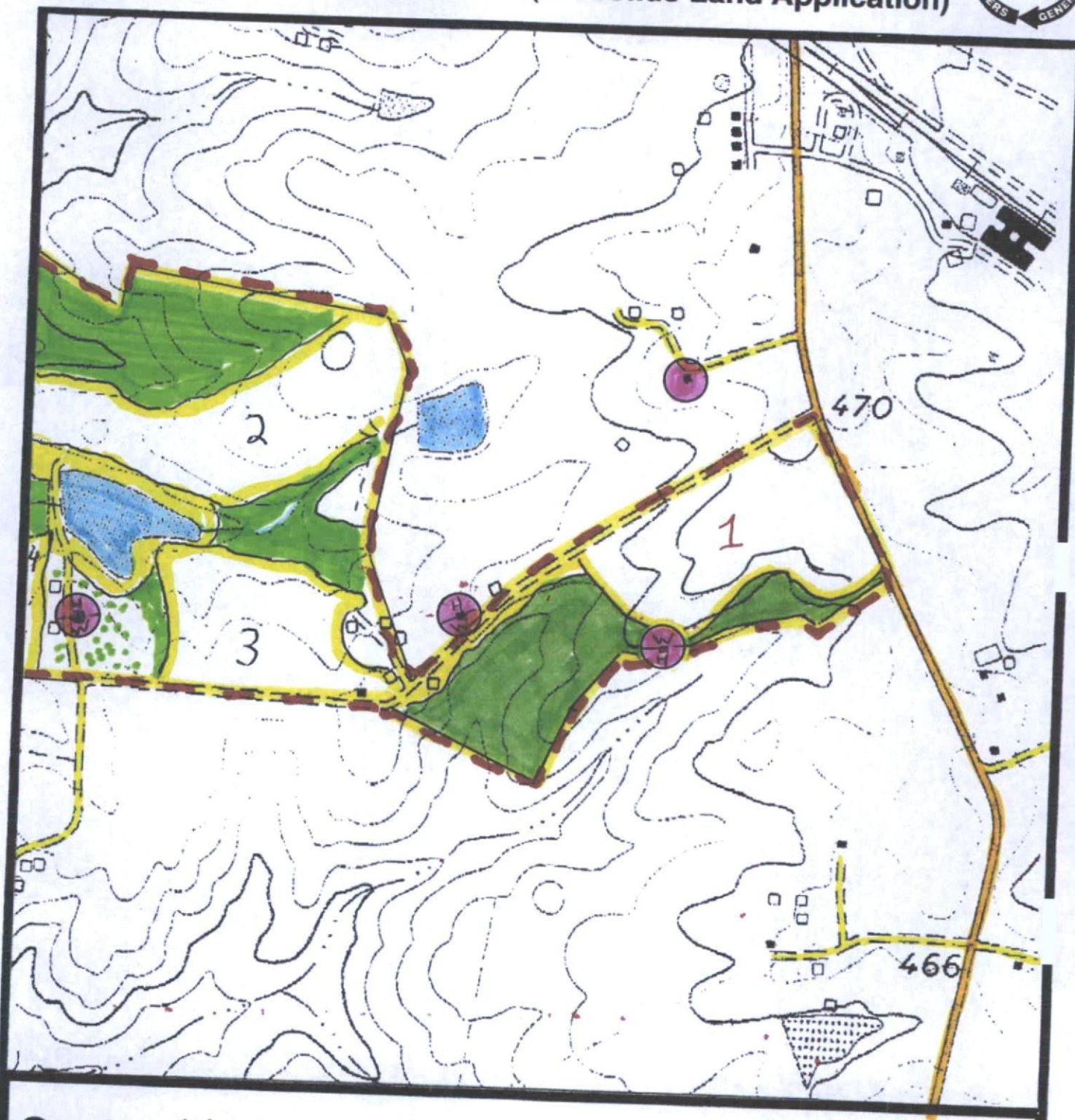


Legend for Site Map

	House and Well
 	Well / Spring
	Perennial Streams & Surface
	Wet Spot
	Intermittent Stream / Drainage
	Trees and Woods
	Private Drive
	Rock / Rocky Area
	Sinkhole
	Severely Eroded Spot
	State Road
	Field Boundary / Fence
	Property Line
	Slope
	Frequent Flooded Soil

Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1 inch = 660 feet

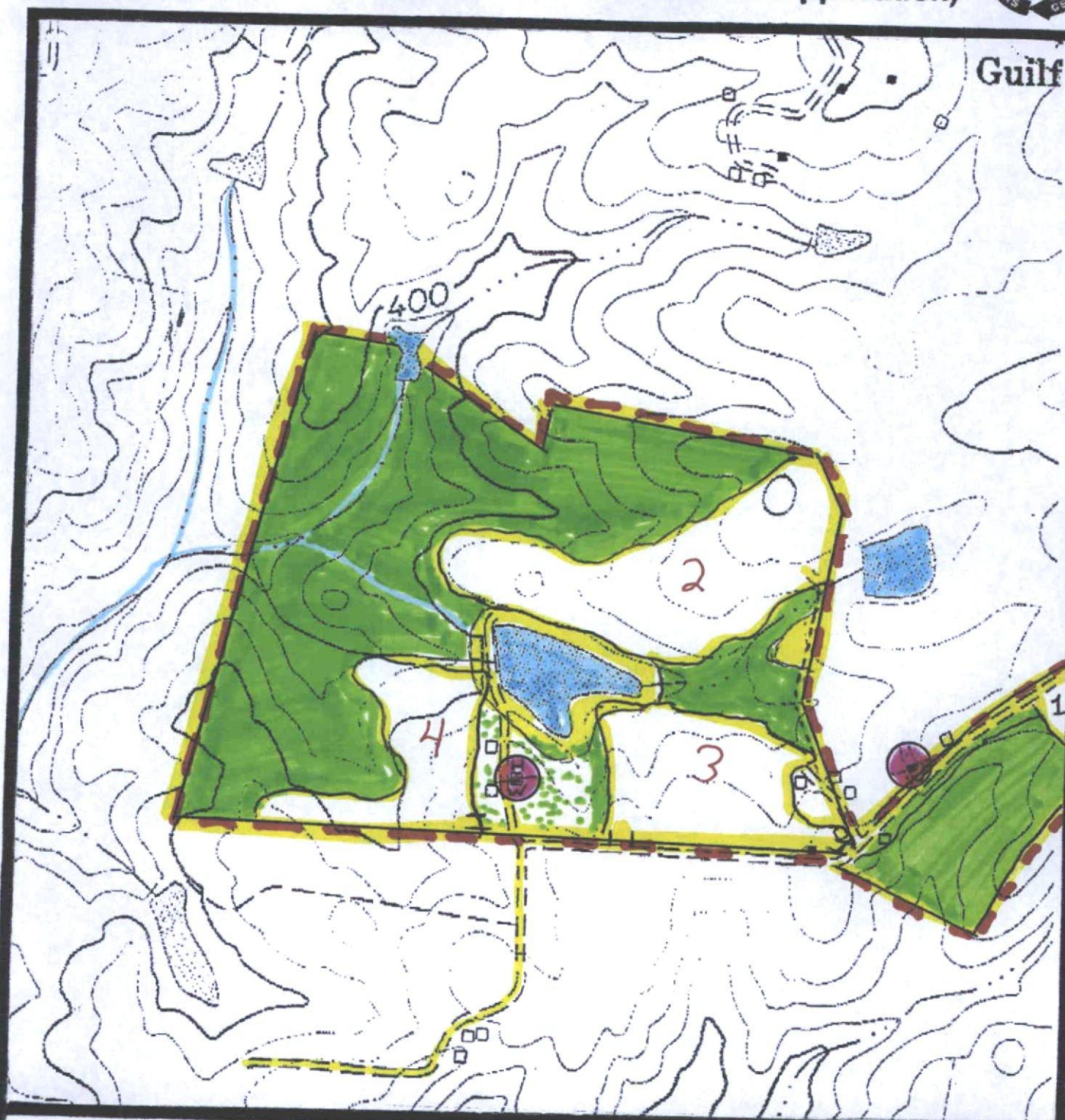
LUNES 1

SITE PLAN



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1 inch = 660 feet

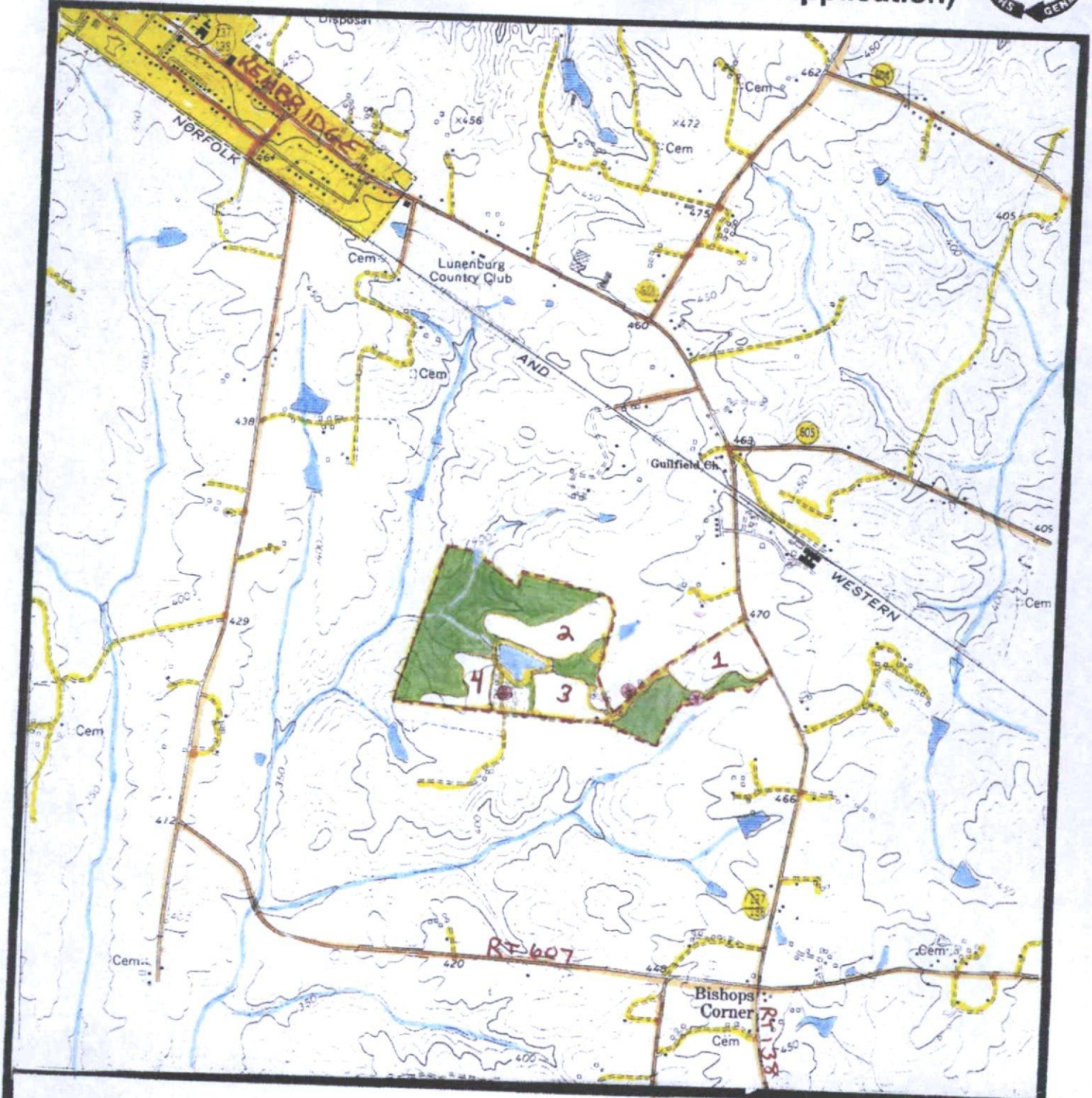
LUNES 2-4

SITE PLAN



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1 inch = 2,000 feet

LUNES 1-4

TOPOGRAPHIC MAP

